

CLAIMS

1. A transmitter comprising:

a transmission processing means for
transferring a content signal or processing copyright
5 protection on a content signal and then transferring the
processed content signal and

a transmission controlling means for holding
information indicating a receiver which does not have a
function enabling copying of content by using the content
10 signal or the processed content signal transferred from
the transmission processing means and controlling output
of the signal to be transferred from the transmission
processing means according to whether or not information
indicating the receiver which is connected to the
15 transmission processing means is included in the held
information.

2. A transmitter as set forth in claim 1, wherein

said transmitter comprises a protection
detecting means for determining if said content is
20 copyright protected and

said transmission control means transfers a
copyright protected content signal from said transmission
processing means when said protection detecting means
determines that said content is copyright protected and
25 transfers a non-copyright protected content signal

3. A transmitter asset forth in claim 2, wherein
said transfer controlling means monitors for a
change in connection of the receiver connected to said
transmission processing means while transferring a
content signal of copyright protected content without
providing copyright protection and controls said
transmission processing means so as not to transfer a
non-copyright protected content signal when it detects
that the connection has been changed.

5. A transmitter as set forth in claim 3, wherein
said transmission controlling means suspends
the transfer of the non-copyright protected content
signal or transfers a copyright protected content signal
instead of the non-copyright protected content signal so
that said non-copyright protected content signal is not
transferred.

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said transmission controlling means holds information indicating said receiver in a tamper-proof updateable manner.

7. A signal transfer method including of the steps
5 of

holding in a transmitter information indicating receivers not having the function of being able to receive a content signal to copy the content and controlling the output of the content signal or
10 copyright protected content signal at the transmitter according to whether or not information indicating a connected receiver is included in the held information.

8. A signal transfer method as set forth in claim 7, comprising the steps of
15 determining whether to provide copyright protection for said content using said content signal and transferring said copyright protected content signal when determining that the content is copyright protected and receiving said non-copyright protected
20 content signal regardless of whether said content is copyright protected when determining that information indicating the connected receiver is included in said held information.

9. A signal transfer method as set forth in claim
25 8, comprising the steps of

monitoring for a change in connection of the connected receiver while transferring a content signal of copyright protected content without providing copyright protection and

5 prohibiting the transfer of said non-copyright protected content signal when detecting that the connection has been changed.

10 10. A signal transfer method as set forth in claim 9, comprising

monitoring for a change in connection of said receiver by a hot plug detection function or plug and play function.

11. A signal transfer method as set forth in claim 9, comprising

15 suspending the transfer of the non-copyright protected content signal or transferring a copyright protected content signal instead of the non-copyright protected content signal so as to prohibit the transfer of said non-copyright protected content signal.

20 12. A data distribution system comprising:

a data providing means for adding first control information for controlling a usage state of the content data to the intended content data and providing the result as the data to be distributed,

25 a data transmitting means for performing

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predetermined second encryption on said provided data to be distributed and transmitting the encrypted data to be distributed, and

5 a data receiving means for receiving said transmitted encrypted data to be distributed, performing decryption of said second encryption, detecting said first control information from the decrypted data to be distributed, and controlling the output of said content data based on the detected first control information.

10 13. A data distribution system as set forth in claim 12, wherein

15 said data providing means superimposes said first control information as electronic watermark information on said content data and provides the superimposed content data as the data to be distributed to said data transmitting means,

20 said data transmitting means performs the predetermined second encryption on said provided data to be distributed and transmits the encrypted data to be distributed, and

25 said data receiving means receives said transmitted encrypted data to be distributed, performs the decryption of said second encryption, detects said superimposed first control information from the decrypted data to be distributed, and controls the output of said

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content data based on the detected first control information.

14. A data distribution system as set forth in claim 13, wherein

5 said data providing means performs
predetermined first encryption on the content data with
said first control information superimposed thereon as
the electronic watermark information and provides the
encrypted data as said data to be distributed to said
10 data transmitting means,

 said data transmitting means performs said
second encryption for said provided data to be
distributed and transmits the encrypted data to be
distributed, and

15 said data receiving means receives said
transmitted encrypted data to be distributed, performs
the decryption of said second encryption, generates the
content data with said electronic watermark information
superimposed thereon by performing the decryption of said
20 first encryption, detects said superimposed first control
information from the generated content data, and controls
the output of said content data based on the detected
information.

15 15. A data distribution system as set forth in
claim 14, wherein

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said data transmitting means adds second control information for controlling a usage state of the content data to said provided data to be distributed, performs said second encryption on said data to be distributed with the second control information added thereto, and transmits the encrypted data to be distributed, and

said data receiving means receives said transmitted encrypted data to be distributed, performs the decryption of said second encryption, detects said second control information, generates the content data with the electronic watermark information superimposed thereon by performing the decryption of said first encryption for said decrypted data to be distributed, detects the first control information superimposed as said electronic watermark information from the generated content data, and controls the output of said content data based on said detected first control information and second control information.

16. A data distribution system as set forth in claim 12, wherein

said data providing means adds a control descriptor indicating said first control information to said content data and provides the content data with the control descriptor added thereto as the data to be

distributed to said data transmitting means,

said data transmitting means performs the predetermined second encryption for said provided data to be distributed and transmits the encrypted data to be distributed, and

said data receiving means receives said transmitted encrypted data to be distributed, performs the decryption of said second encryption, detects said added first control information from the decrypted data to be distributed, and controls the output of said content data based on the detected first control information.

17. A data distribution system as set forth in claim 12, wherein

said data transmitting means adds second control information for controlling a usage state of the content data to said provided data to be distributed, performs said second encryption for said data to be distributed with the second control information added thereto, and transmits the encrypted data to be distributed, and

said data receiving means receives said transmitted encrypted data to be distributed, performs the decryption of said second encryption, detects said second information, performs the decryption of said first

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encryption for said decrypted data to be distributed to generate content data with the control descriptor added thereto, detects the first control information added as the control descriptor from the generated content data, and controls the output of said content data based on said detected first control information and second control information.

18. A data distribution system as set forth in claim 12, wherein
- 10 said data providing means superimposes third control information for controlling a usage state of the signal when outputting said content data by an analog signal on the content data as the electronic watermark information and provides the content data with the third
- 15 control information superimposed thereon as said data to be distributed,
- said data transmitting means performs the predetermined second encryption for said provided data to be distributed, transmits the encrypted data to be
- 20 distributed, and
- said data receiving means receives said transmitted encrypted data to be distributed, performs the decryption of said second encryption, and outputs the signal with the decrypted said third control information
- 25 superimposed thereon as the electronic watermark

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information as an analog signal output in response to a request.

19. A data distribution system as set forth in claim 12, wherein

5 said data receiving means further has a memory means for storing information concerning charging with respect to a usage of the content data based on a usage state of said received content data.

20. A data distribution method including the steps
10 of

 adding first control information for
controlling a usage state of content data to intended
content data based on an instruction of an owner of the
content data and providing the result as the data to be
15 distributed,

 performing predetermined second encryption on
said provided data to be distributed,

 transmitting the encrypted data to be
distributed,

20 receiving said transmitted encrypted data to be
distributed at any receiver,

 performing the decryption of said second
encryption,

 detecting said first control information from
25 the decrypted data to be distributed, and

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controlling the output of said content data based on the detected first control information.

21. A data distribution method as set forth in claim 20, comprising

5 superimposing said first control information as electronic watermark information on said content data and providing the superimposed content data as the data to be distributed and

10 detecting said first control information from the decrypted data to be distributed by detecting said electronic watermark information from said decrypted data to be distributed.

22. A data distribution method as set forth in claim 21, comprising

15 performing predetermined first encryption on the content data with said first control information superimposed thereon as the electronic watermark information and providing the encrypted data as said data to be distributed,

20 performing decryption of said first encryption on the data for which decryption of said second encryption was performed to generate content data with said electronic watermark information superimposed thereon, and

25 detecting said superimposed first control

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information from said generated content data.

23. A data distribution method as set forth in claim 22, comprising

adding second control information for

5 controlling a usage state of the content data to said provided data to be distributed,

performing said second encryption on said data to be distributed with the second control information added thereto,

10 transmitting the encrypted data to be distributed,

receiving said transmitted encrypted data to be distributed at any receiver,

performing the decryption of said second
15 encryption,

detecting said second control information,

generating the content data with the electronic watermark information superimposed thereon by performing the decryption of said first encryption for said
20 decrypted data to be distributed,

detecting the first control information superimposed as said electronic watermark information from the generated content data, and

controlling the output of said content data
25 based on said detected first control information and

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second control information.

24. A data distribution method as set forth in
claim 20, comprising

adding said first control information by adding
5 a control descriptor indicating said first control
information to said content data and

detecting said first control information by
detecting said added first control information from the
data to be distributed for which decryption of said
10 second encryption is performed.

25. A data distribution method as set forth in
claim 24, comprising

adding second control information for
controlling a usage state of the content data to said
15 provided data to be distributed,

performing said second encryption for said data
to be distributed with the second control information
added thereto,

transmitting the encrypted data to be
20 distributed,

receiving said transmitted encrypted data to be
distributed,

performing the decryption of said second
encryption,

25 detecting said second information,

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5 detecting the first control information added
as the control descriptor from the generated content
data, and

26. A data distribution method as set forth in claim 20, comprising

performing the predetermined second encryption
20 for said provided data to be distributed,

receiving said transmitted encrypted data to be distributed at any receiver,

25 performing the decryption of said second

encryption, and

outputting the signal with the decrypted said
third control information superimposed thereon as the
electronic watermark information when at least an analog
5 signal output is requested.

27. A data distribution method as set forth in
claim 20, comprising

charging for usage of the content data based on
a usage state of said received content data.

28. A data receiver for receiving a signal
10 comprised of data to be distributed including intended
content data plus first control information for
controlling a usage state of the content data and
transmitted after performing predetermined second

15 encryption, comprising

a receiving means for receiving said
transmitted signal,

a second decrypting means for performing
decryption of said second encryption with respect to said
20 received signal,

a first control information detecting means for
detecting said first control information from said
decrypted data to be distributed, and

an output controlling means for controlling the
25 output of said content data based on said detected first

control information.

29. A data receiver as set forth in claim 28,
wherein

5 said signal to be transmitted is a signal
comprised of content data plus first control information
on which predetermined first encryption is performed and
further on which predetermined second encryption is
performed,

10 said receiver further comprises a first
decrypting means for performing decryption of said first
encryption with respect to the data decrypted by said
second decrypting means, and

15 said first control information detecting means
detects said first control information from said data to
be distributed resulting from the decryption at said
first decrypting means.

30. A data receiver as set forth in claim 29,
wherein

20 said first decrypting means performs said
decryption using predetermined key data distributed by an
owner of said content data.

31. A data receiver as set forth in claim 30,
wherein

25 said second decrypting means performs said
decryption using predetermined key data distributed by a

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32. A data receiver as set forth in claim 31,
wherein

said first control information detecting means
detects said first control information superimposed as
said electronic watermark information from said decrypted
data to be distributed.

said signal to be transmitted is a signal comprised of content data plus said first control information and second control information for controlling a usage state of said content data on which predetermined first encryption is performed and further predetermined second encryption is performed,

a control content determining means for
determining a content of control based on said detected
25 first control information and second control information,

and

said output controlling means controls the output of said content data in accordance with the determined content of control.

5 34. A data receiver as set forth in claim 33,
wherein

said first control information is information set by an owner of said content data,

 said second control information is information
10 set by a transmitting party of said signal, and

 said control content determining means
determines said content of control so that the setting by
the owner of said content data is given priority over the
setting by the transmitting party of said signal based on
15 said detected first control information and second
control information.

 35. A data receiver as set forth in claim 31,
wherein

 said first control information is added to said
20 content data as a control descriptor, and

 said first control information detecting means
detects first control information added as said control
descriptor from said decrypted data to be distributed.

 36. A data receiver as set forth in claim 28,
25 wherein

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said signal to be transmitted is a signal
comprised of said content data plus third control
information for controlling a usage state of the signal
when outputting said content data by an analog signal as
5 the electronic watermark information, and

said output controlling means outputs a signal
including said third control information superimposed as
electronic watermark information when outputting said
content data by an analog signal in response to a
10 request.

37. A data receiver as set forth in claim 28,
further having

a memory means for storing information
concerning charging with respect to a usage of the
15 content data based on a usage state of said received
content data.

38. A data provider comprising
a control information adding means for adding
control information for controlling a usage state of
20 content data designated by an owner of the content data
to intended content data and

provides the content data with said control
information added thereto as data to be distributed.

39. A data provider as set forth in claim 38, which
25 further has an encrypting means for encrypting

by a predetermined scheme the content data to which said control information is added and

provides said encrypted content data.

40. A data provider as set forth in claim 39,

5 wherein

said control information adding means
superimposes said control information on said content
data as electronic watermark information.

41. A data provider as set forth in claim 39,

10 wherein

said control information adding means adds said control information to said content data as a control descriptor.

42. A data provider as set forth in claim 38, which

15 further has an analog signal control

information adding means for superposing, as electronic watermark information on said content data, analog signal control information, designated by an owner of said content data, for controlling a usage state of a signal

20 when said content data is output as an analog signal and

provides content data on which said analog signal control information is superimposed.

43. A data providing method including the steps of

adding control information for controlling a
25 usage state of content data designated by an owner of

content data to intended content data,

encrypting said content data with the control information added thereto by a predetermined method, and providing the encrypted content data as the data to be distributed.

44. A data providing method as set forth in claim 43, including

providing key data for decrypting said
encrypted content data to only a receiver receiving said
10 distributed encrypted content data.

45. A data transferer comprising
an encrypting means for further encrypting, by
a predetermined method, data to be distributed including
intended content data plus control information for
controlling a usage state of said content data designated
by an owner of the content data and encrypted by a
predetermined scheme and

a transferring means for transferring said encrypted data to be distributed to any channel.